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TI High-strength **Al alloy** wires and coils showing high thermal and electric conductivity and their preparation

IN Kawabe, Nozomu; Yamamoto, Susumu; Yoshioka, Takeshi

PA Sumitomo Electric Industries, Ltd., Japan

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PI	JP 10226839	A2	19980825	JP 1997-52470	19970219
AB	The Al alloys contain Si 0.2-13, Fe 0.2-1.0, Cu 0.2-6.0, Mn <1.2, and Mg <4.5 wt.% and have HMV hardness 140-200 and crystal grain aspect ratio .gt;req.10. The Al alloys may further contain additives selected from Co <1.5, Cr <0.5, Ti <0.2, Zn 0.1-7.7, Zr 0.05-0.25, and V <0.10 wt.%. The alloys may have surficial residual compressive stress 10-200 N/mm ² . High-strength Al alloy wires are prep'd. from Al alloy powders of the compns. by heating, solidifying, and then wire drawing, whereas soln. treatment may be carried out before or alternately with the wire drawing. The Al alloy wires are coiled and heat treated to give coils.				